PATENT ABSTRACTS OF JAPAN

(11)Publication number :   11-008712

(43)Date of publication of application : 12.01.1999

(51)Int.Cl.

HO4M 11/00
HO4N   1/00
HO4N   1/32
// HO4L   9/32

(21)Application number : 09-158986   (71)Applicant : MURATA MACH LTD

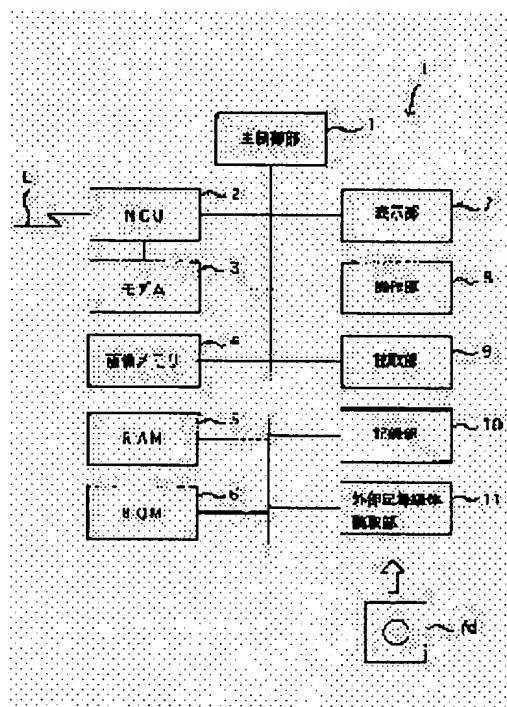(22)Date of filing :   16.06.1997   (72)Inventor : YAMAGUCHI TETSUJI

(54) COMMUNICATION TERMINAL EQUIPMENT WITH SUBADDRESS FUNCTION

(57)Abstract:

PROBLEM TO BE SOLVED: To start communication with a simple operation by correspondingly storing the opposite telephone number and a sub-address for designating an opposite memory box.

SOLUTION: The opposite telephone number and the sub-address for designating the opposite memory box are previously and correspondingly stored in an RAM 5. A main control part 1 transmits the sub-address which is correspondingly stored after the stored opposite telephone number is called and data communication with the opposite party is started. When an operation part 8 selects the group of the opposite telephone number and the sub-address, which are stored in the RAM 5, an NCU 2 can automatically send the sub-address and start communication after it dials the opposite telephone number through a communication line L in the device. Thus, it is not necessary to input the sub- address with the operation of the operation part 8 at every communication for using a sub-address function.

LEGAL STATUS

[Date of request for examination]   14.10.1998

* NOTICES *

JPO and NCIPI are not responsible for any
damages caused by the use of this translation.

1.This document has been translated by computer. So the translation may not reflect the original
precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention] This invention relates to the going-to-hospital-regularly terminal unit with a sub-address function of a configuration of receiving the stored data from the memory box which made store them or specified the transmitted data as the memory box specified by the sub-address.
[0002]
[Description of the Prior Art] From the former, there is a thing equipped with the sub-address function in the facsimile apparatus which is one of the communication terminals. This sub-address function transmits a sub-address signal, specifies the memory box of partner equipment and receives the data stored in the box which was made to store in the box which specified the transmitted data, or was specified as it.
[0003] Drawing 6 is drawing explaining the communication procedure when performing a sub-address function. Drawing 6 (a) is the case (the F code polling) where drawing 6 (b) receives the data with which the call origination side was stored in the memory box of a called party, when it stores in the memory box of a called party the data which the call origination side transmitted (the F code transmission). When transmitting data from the call origination side of drawing 6 (a), if CNG (calling tone) is detected, a called party sends out (1) and CED (called station recognition signal), and sends out (2), then NSF (non-standard functional signal), CSI (call origination terminal identification signal) and DIS (digital recognition signal) (3). Then, PWD (password (transmission) signal), SUB (sub-address signal), TSI (transmit-terminal recognition signal), and DCS (digital instruction signal) are sent out to these signals (4).
[0004] Here, if a setup with sub-address capacity and password capacity is detected from the inside of DIS, as the response, the call origination side would send out the password (PWD) and the sub-address (SUB), and will specify the memory box of a called party. A sub-address is beforehand set as 1 to 1 to each memory box, it is used in order to access each memory box (storing of data, reference, drawing), and a password is beforehand set up to each memory box, and it is used in order to restrict access of a memory box.
[0005] That is, although a memory box is specified by the sub-address, if the password transmitted to coincidence is not in agreement with the password set up beforehand, access of the specified memory box is forbidden. In addition, such at the time of a setup, since the multi-statement of the password can also be carried out to one memory box, if one of passwords is transmitted, access of a memory box will be permitted. Moreover, such at the time of a setup, since it can avoid setting up a password, even when there is transmission without a password or what kind of password has been transmitted, access of a memory box is permitted.
[0006] Then, if TCF (training check signal) is received, a called party will answer a letter in (5) and CFR (reception preparation acknowledge signal), and will receive (6) and image data (PIX) (7). This received data is specified by the sub-address and stored in the memory box in which access was permitted with the password. Here, the case where receive MPS (multi-page signal), answer a letter in

(8) and MCF (message acknowledge signal), and the image data of (9) and degree page (the 2nd page) is received after receiving image data is shown (10).

[0007] And if it checks having received EOP (procedure terminate signal) and having received (11) and all image data, a letter will be answered in MCF and (13) and a communication link will be ended in response to (12) and DCN (cutting instruction signal). Then, a called party can take out image data from a memory box, and can carry out the printout of this image to the recording paper. On the other hand, in the polling reception by the side of the call origination of drawing 6 (b), if CNG is detected, a called party sends out (21) and CED and sends out (22), then NSF, CSI and DIS (23). Then, PWD (password (polling) signal), SEP (selection polling signal), CIG (call origination terminal identification signal), and DTC (digital SEND statement signal) are sent out to these signals (24).

[0008] Here, if a setup with sub-address capacity and password capacity is detected from the inside of DIS, a setup with both capacity would be performed similarly in DTC, and the call origination side would send out the password (PWD) and selection polling signal (SEP) for carrying out polling reception, and will have specified and accessed the memory box. Then, if a called party sends out DCS (25) and TCF (26) and CFR is received, it will transmit (27) and image data (PIX) (28). This transmit data is specified by the sub-address and picked out from the memory box where access was permitted by the selection polling signal.

[0009] Here, after transmission of image data, MPS was sent out and the image data of (30) and degree page (the 2nd page) is transmitted in response to the reply of (29) and MCF (31). If transmission of all image data is completed, EOP is sent out, (32) and MCF will be received, (33) and DCN will be sent out, and (34) and a communication link will be ended.

[0010]
[Problem(s) to be Solved by the Invention] Thus, in the conventional communication terminal with a sub-address function, in order to specify the memory box of partner equipment, the password was sent out with the sub-address if needed, but in order to send these out, the actuation input had to be carried out with the ten key etc., and there was a problem that this actuation was troublesome and also tends to produce an input error each time.

[0011] This invention is made in view of such a situation, beforehand, registers the sub-address and the password for every phase hand, and aims at the ability to start a communication link by easy actuation.

[0012]
[Means for Solving the Problem] In order to attain the above-mentioned purpose, the sub-address memorized by corresponding after the communication terminal with a sub-address function according to claim 1 carried out call origination of the phase hand telephone number memorized by the storage means which the phase hand telephone number and the sub-address for specifying a memory box were made to correspond, and memorized them, and this storage means is transmitted, and it has the control means which starts data communication with a phase hand.

[0013] The communication terminal with a sub-address function according to claim 2 The 1st table which the sub-address and password for specifying a memory box were made to correspond, and was memorized, The sub-address and password of the 2nd table which the address and the phase hand telephone number of the 1st table were made to correspond, and memorized them, and the 1st table [/ when selection call origination of the phase hand telephone number was carried out from the 2nd table] are transmitted, and it has the control means which starts data communication with a phase hand.

[0014] That is, if a phase hand's telephone number is chosen from the 2nd table, from the address of the 1st table memorized by corresponding, a control means will search a sub-address and a memory box, and will transmit these to a phase hand. The communication terminal with a sub-address function according to claim 3 chooses a sub-address and a password from the 1st table which the sub-address and password for specifying a memory box were made to correspond, and was memorized, the 2nd table which memorized the phase hand telephone number, and the 1st table after choosing the phase hand telephone number from the 2nd table, and is equipped with the control means which starts data communication with a phase hand.

[0015] That is, the 2nd table to the phase hand telephone number transmits the sub-address and

password which were chosen by the 1st table to a sub-address and a password carrying out call origination of the phase hand telephone number chosen when chosen respectively, and a control means starts a communication link.

[0016]
[Embodiment of the Invention] Below, the gestalt of operation of this invention is explained with a drawing. Drawing 1 is the block diagram showing the configuration of the communication terminal with a sub-address function concerning this invention. Although the configuration of facsimile apparatus F is here shown as an example, this invention may be the personal computer (personal computer) equipped with data communication facility etc. that what is necessary is just the communication terminal which uses a sub-address function, in order not to be limited to this but to specify the memory box of other communication terminals.

[0017] The main control section in which 1 constitutes the control means of this invention from a CPU etc. in drawing, NCU to which 2 performs network control of sending out of the dial signal to a communication line L etc., The modem which performs the modulation and recovery of a signal in order that 3 may carry out facsimile communication of the image data, the image memory with which 4 accumulates the image data of facsimile communication, and 5 as a storage means RAM which memorizes managed tables, such as the phase hand telephone number and a sub-address, etc., ROM 6 remembered the processing program to be beforehand, the display by which 7 was constituted from a liquid crystal screen, LED, etc., The control unit by which 8 was constituted from various actuation keys, a switch, etc., the read station which reads the image data of the manuscript with which 9 was set, The Records Department where 10 carries out the printout of the image data to the detail paper, and 11 are the external record-medium read stations for reading a processing program etc. in the record media fd, such as a floppy disk.

[0018] Processing circuits, such as facsimile communications control, and coding/decryption of image data, are included in the main control section 1. Moreover, the main control section 1 performs a procedure which is described below according to an instruction of the program which read the processing program recorded on the record medium fd by the external record-medium read station 11, and read it after that separately from the processing program memorized by ROM6.

[0019] Although the basic actuation which decodes the image data which received through the communication line L, and carries out a printout from the Records Department 10 is made while this facsimile apparatus F encodes the image data read by the read station 9 and transmitting through a communication line L A sub-address (SUB), a selection polling signal (SEP), and a password (PWD) are sent out through a communication line L. Storing data are receivable from the box which was made to store in the box which specified the memory box of other communication terminals (facsimile apparatus, personal computer, etc.), and specified the transmitted data, or was specified as it (refer to drawing 6).

[0020] If a sub-address function is used, the junction function which carries out the temporary storage of the data to the notice plate function which enables transmission and reception of the data which used the memory box, the confidential function to permit the ejection of data only to those who inputted the personal identification number, and other communication terminals in order to carry out junction transmission is realizable. In claim 1 of this invention, it is characterized by transmitting the sub-address memorized [after making the phase hand telephone number and a sub-address correspond to RAM5, memorizing to it and the main control section's 1 carrying out call origination of this memorized phase hand telephone number to it beforehand], and starting data communication with a phase hand.

[0021] That is, by the control unit 8, if the group of the phase hand telephone number memorized by RAM5 and a sub-address is chosen, after NCU2 dials the phase hand telephone number through a communication line L, a sub-address can be sent out automatically and a communication link can be started. By this, like before, since it becomes unnecessary to input a sub-address by actuation of a control unit 8, an input error is lost at every communication link which uses a sub-address function, and operability improves to it.

[0022] Moreover, if the telephone number which searches the phase hand telephone number and carries

out call origination from RAM5 is memorized when the direct input of the phase hand telephone number is carried out with the ten key of a control unit 8 etc. or one-touch dial actuation is carried out, the sub-address memorized by corresponding is sent out in the communication procedure after call origination. An example of the configuration of the program one-touch table T memorized by RAM5 is shown in drawing 2 .

[0023] Here, only the phase hand from whom the communication link classification d is "the F code transmission" and the "F code polling" could perform the sub-address function, and, in addition to the configuration of the conventional program one-touch table, in addition to this, has remembered Password g to be Sub-address f to the phase hand telephone number c. if selection actuation of the program one-touch number a "3" is carried out by the control unit 8 -- phase hand name b "abc" -- data transmission -- it should carry out -- phase hand number c "12-345-6789" -- dialing -- sub-address f "01234567890123456789" and password g "01234567890" It sends out, a memory box is specified and the F code transmission is performed (refer to drawing 6 (a)). if selection actuation of program one-touch number a "4 [moreover,]" is carried out -- phase hand name b "OOOO" to data reception -- it should carry out -- phase hand number c "672-1111" -- dialing -- sub-address f "1111222333444" It sends out as a selection polling signal, a memory box is specified, and the F code polling is performed (refer to drawing 6 (b)).

[0024] In addition, when the communication link classification d is "confidential", the option number e shows a phase hand's confidential box number (memory box number), and when the communication link classification d is the "multiple address", the option number e shows the group number to which the terminal which performs broadcast belongs. Moreover, as it was not limited to the time when the program one-touch key was operated but being mentioned above, when a phase hand number is directly inputted with a ten key, automatic transmission of Sub-address f and Password g may search Table T, and may transmit Sub-address f and Password g corresponding to the phase hand number c.

[0025] Next, claim 2 is explained. In claim 2, it has the 2nd table which the 1st table which the sub-address and the password were made to correspond in RAM5, and was memorized, and the address and the phase hand telephone number of the 1st table were made to correspond, and memorized them. When selection call origination of the phase hand telephone number is carried out from the 2nd table, the main control section 1 transmits the sub-address and password of the 1st table, and starts data communication with a phase hand. That is, if a phase hand's telephone number is chosen from the 2nd table, from the address of the 1st table memorized by corresponding, a sub-address and a memory box will be searched and these will be transmitted to a phase hand.

[0026] The example of a configuration of the F code table T1 in which the example of a configuration of the program one-touch table T2 established as the 2nd table of the above was prepared by drawing 3 (b) as the 1st table of the above is shown in drawing 3 (a). The program one-touch table T2 here has composition excluding Sub-address f and Password g from the table T of drawing 2 , instead has memorized the sub-address b2 and the password b3 to the F code table T1.

[0027] Moreover, the address (record number b1) of the F code table T1 is memorized by the option number a5 of the program one-touch number a1 whose communication link classification a4 of the program one-touch table T2 is "the F code transmission" and the "F code polling." With the illustrated configuration, if selection actuation of the program one-touch number a1 "3" is carried out, for example Dial the phase hand number a3 "12-345-6789" in order to perform data transmission to the phase hand name a2 "abc", and the same record number b1 as the option number a5 is searched from the F code table T1. A sub-address b2 "01234567890123456789" and password b3 "01234567890" It sends out, a memory box is specified and the F code transmission is performed.

[0028] If it does in this way, the configuration of the program one-touch table T2 should just newly form the F code table T1 in the conventional state. Moreover, since what is necessary is just to be able to bundle up to the F code table T1, to be able to register a sub-address b2 and a password b3, and to associate the F code table T1 and the program one-touch table T2, automatic transmission of a sub-address and a password is easily realizable. Furthermore, since what is necessary is just to register the same record number b1 of the F code table T1 into the program one-touch table T2 in sending out the

same sub-address and a password to a separate phase hand, the use field of RAM5 can be saved.

[0029] In addition, the phase hand number a3 can send out a sub-address b2 and a password b3 after call origination, even when it is not limited to what is registered into the program one-touch table T2, but only the phase hand number a3 and the record number b1 of the F code table T1 may be associated and registered and a phase hand number is directly inputted by the ten key in this case.

[0030] Next, claim 3 is explained. In claim 3, it has the 1st table which the sub-address and the password were made to correspond in RAM5, and was memorized, and the 2nd table which memorized the phase hand telephone number. If a sub-address and a password are chosen from the 1st table after the main control section 1 chooses the phase hand telephone number from the 2nd table, it will start data communication with a phase hand. That is, the 2nd table to the phase hand telephone number transmits the sub-address and password which were chosen after carrying out call origination of the phase hand telephone number chosen when chosen respectively, and the 1st table to a sub-address and a password start a communication link.

[0031] The example of a configuration of one-touch table T3 established as the 2nd table of the above is shown in drawing 4 , and the F code table T1 of a configuration of having been shown in drawing 3 (b) can be used for it as the 1st table of the above. What is necessary is to choose a record number b1 and just to choose the group of a sub-address b2 and a password b3 from the F code table T1, after an operator's operating either of one-touch key [of a control unit 8] "A" - "C" at this time and choosing a phase hand from one-touch table T3. According to this, a different memory box can be easily specified also to the same phase hand.

[0032] Next, a flow chart shows actuation of facsimile apparatus F explained above. Drawing 5 (a) shows the registration procedure of the program one-touch table T2 shown in drawing 3 (a). First, after choosing an one-touch carbon button (program one-touch number a1), when inputting the phase hand number a3, the phase hand name a2, and the communication link classification a4 and using a sub-address function one by one, the record number b1 of the F code table T1 is inputted (100-104).

[0033] Drawing 5 (b) shows the registration procedure of the F code table T1 shown in drawing 3 (b). First, after choosing the record number b1 to register, the ten key input of a sub-address b2 and the password b3 is carried out (110-112). The actuation at the time of a communication link is shown in drawing 5 (c). When a program one-touch key is inputted, the phase hand number a3 corresponding to the inputted key is searched and dialed from the program one-touch table T2, and the phase hand name a2 is displayed on a display 7. Then, automatically, from the F code table T1, a sub-address b2 and a password b3 are searched and sent out, these are displayed on a display 7, and the communication link which specified the memory box of partner equipment is started (200-205).

[0034] On the other hand, when a program one-touch key is not inputted but an one-touch key is inputted From one-touch table T3, the phase hand number a3 corresponding to the inputted key is searched and dialed. Then, the sub-address b2 and password b3 which were chosen by inputting the record number b1 of the F code table T1 are sent out, these are displayed on a display 7, and the communication link which specified the memory box of partner equipment is started.(206,207,203-205).

[0035]
[Effect of the Invention] Since the communication terminal with a sub-address function of this invention according to claim 1 made the phase hand telephone number and the sub-address for specifying a phase hand's memory box correspond and is memorized, when call origination of it is carried out to the phase hand telephone number, it can transmit a sub-address, and can start data communication with a phase hand, so that he can understand also from the above explanation. Therefore, like before, since a sub-address is sent out, it is not necessary to perform an actuation input and a sub-address function can be realized simply and correctly each time.

[0036] In claim 2, since it related with this and the phase hand telephone number is memorized while making a sub-address and a password correspond and memorizing, when selection call origination of the phase hand telephone number is carried out, the sub-address and password which are associated and memorized can be transmitted, and data communication with a phase hand can be started. Automatic

transmission of a sub-address and a password is realizable only by performing easy registration with this.

[0037] In claim 3, after choosing the phase hand telephone number and becoming at the time of communication link initiation since the phase hand telephone number is memorized while making a sub-address and a password correspond and memorizing, a sub-address and a password can be chosen and data communication with a phase hand can be started.

[Translation done.]

* NOTICES *

JPO and NCIPI are not responsible for any
damages caused by the use of this translation.

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]
[Claim 1] The communication terminal with a sub-address function equipped with the control means which transmits the sub-address memorized by corresponding after carrying out call origination of the phase hand telephone number memorized by the storage means which the phase hand telephone number and the sub-address for specifying a memory box were made to correspond, and was memorized, and this storage means, and starts data communication with a phase hand.
[Claim 2] The 1st table which the sub-address and password for specifying a memory box were made to correspond, and was memorized, When selection call origination of the phase hand telephone number is carried out from the 2nd table which the address and the phase hand telephone number of the 1st table were made to correspond, and memorized them, and the 2nd table The communication terminal with a sub-address function equipped with the control means which transmits the corresponding sub-address and corresponding password of the 1st table, and starts data communication with a phase hand.
[Claim 3] The communication terminal with a sub-address function equipped with the control means which chooses a sub-address and a password from the 1st table, and starts data communication with a phase hand after choosing the phase hand telephone number from the 1st table which the sub-address and password for specifying a memory box were made to correspond, and was memorized, the 2nd table which memorized the phase hand telephone number, and the 2nd table.

[Translation done.]